

Appendix D

Department of the Army Low-Level Radioactive Waste (LLRW) and Mixed Waste (MW) Disposal and Remediation Policy

a. In 1985, Congress enacted the Low-Level Radioactive Waste (LLRW) Policy Amendments Act. This Act requires states to dispose of their own LLRW, and urged formation of compacts with neighboring states to consolidate the number of facilities for the disposal of compact-wide LLRW. Certain states formed nine compacts for LLRW disposal. Other states remain unaffiliated. To date, only two compacts have operating LLRW disposal facilities and no new facilities are foreseen within the next few years or more. In 1991, Envirocare, Inc., a private company in Utah, opened a facility that can dispose of limited concentrations of certain radioactive wastes and even some mixed wastes. Projects that have or will have a probability of discovering or generating LLRW need to be carefully evaluated to determine if suitable waste disposal facilities may be available. It should be noted that a disposal facility may not be available and the only options may be temporary storage or not to remove the material from the site.

b. On 3 September 1992, the Department of Army (DA) was officially designated as the Department of Defense (DoD) Executive Agent for managing disposal of DoD LLRW. The DA delegated this responsibility to the U.S. Army Armament, Munitions, and Chemical Command (AMCCOM) along with certain other responsibilities. See attached Headquarters, U.S. Army Corps of Engineers (HQUSACE) policy memorandums for additional information and specific authorities. The DoD Executive Agent is to assure that DoD components' LLRW disposal practices are in compliance with constantly changing regulatory and license requirements, and to ensure the components' awareness of all available disposal options.

c. The Hazardous, Toxic, and Radioactive Waste Mandatory Center of Expertise (HTRW-MCX) has been designated to provide radioactive technical support to assist the USACE Districts working on radioactive projects. This support is available during all phases of a project from initial investigation through transportation and disposal. All USACE elements are required to notify and coordinate with HTRW-MCX all radioactive work and activities (LLRW or mixed waste (MW)) being done for DoD or for others. Timely notification and cooperation between the USACE Districts and the HTRW-MCX

will help the HTRW-MCX achieve its delegated responsibility for the proper management and disposal of LLRW and MW. See attached "USACE Project Report" form. The USACE HTRW-MCX will perform USACE-wide coordination for HQUSACE and with the DoD executive agent for projects that are DoD funded. USACE Districts must coordinate all LLRW and MW disposal actions to ensure that appropriate disposal is accomplished and that appropriate records are maintained and reported. All LLRW disposal actions funded by DoD are to be approved by the DoD Executive Agent (see attached "Request for LLRW/MW Generated or Waste Disposal" form).

d. It is requested that the following information (see attached forms) be provided to the HTRW-MCX, ATTN: CENWO-HX-S, 12565 West Center Road, Omaha, NE 68144-3869, Fax 402-697-2613.

(1) USACE project report. The attached USACE project report form and information should be provided as soon as a project is identified to have a potential for waste or unwanted radioactive items that disposal. This information will be maintained by the HTRW-MCX so that assistance can be provided when determining disposal options.

(2) Disposal plan. Because of the complexity with LLRW/MW disposal or storage related to Compact, state, NRC, and Federal requirements, it is highly recommended that a disposal plan be developed as early as possible. The disposal plan is a report with specific project information that describes the type of material and proposed methods for disposal of LLRW or MW. The attached outline is recommended information required as a minimum for management decisions and technical support. If this information is unavailable, it could be included in a scope of work or other documents that will be generated for the project for use in making decisions as to treatment, disposal, packaging, transportation, and budget. This is not to be all-inclusive but is intended to generate questions as to the project technical needs and management requirements.

(3) Request for LLRW/MW for disposal. The attached "Request for LLRW/MW for Disposal" form and information are required to be provided as soon as a determination for disposal has been made and prior to any shipment. It is recommended that the information be provided to the HTRW-MCX for review and concurrence at least 3 weeks before shipment for all projects. For DoD-funded projects only, this information will then be forwarded by the HTRW-MCX to the DoD Executive Agent for coordination and approval.

EM 1110-35-1
30 Jun 97

USACE Project Report
on
Current/Proposed Low Level Radioactive Waste (LLRW) / Mixed Waste (MW)
Generation/Remediation Activities

DESIGN DISTRICT : _____

EXECUTING DISTRICT : _____

USACE POC : _____

PHONE # : _____ FAX # : _____

PROGRAM/FUNDING-IRP, FUDS, SUPERFUND, ETC. .: _____

PROJECT NAME/ID NUMBER: _____

STATUS/PHASE : _____

INSTALLATION NAME: _____

INSTALLATION POC: _____

PHONE #: _____ FAX #: _____

SITE NAME: _____

STATE: _____ COMPACT: _____

SCOPE OF WORK: _____

RADIONUCLIDES OF CONCERN: _____ CONCENTRATIONS : _____

Please attach any additional information that is available or if additional space needed:

_____	_____
_____	_____
_____	_____

VOLUME OF RAD WASTE IN CU FT: _____

MIXED WASTE PRESENT? Y/N : _____ PROFILED YET? Y/N : _____

DESCRIPTION OF WASTE/PROFILE: _____

Send or Fax to HTRW-MCX, ATTN: CENWO-HX-S, 12565 West Center Road, Omaha NE 68144-3869
Fax 402-697-2613. For POC and additional information see the HTRW Center of Expertise Specialists.

Recommended Disposal Plan/Report Outline

The following is recommended information that as a minimum would be required for decisions on disposal, storage, or treatment. This information could be included in a scope of work or other documents that will be generated for the project that would be used to make decisions as to treatment, disposal, storage, packaging, transportation, and budget. This is not to be inclusive, but is to generate questions as to the project technical needs and management requirements. For POC and additional information, see the HTRW Center of Expertise Specialists.

1. Installation name
2. Project name
3. Proposed methods to profile or classify waste. Type of project RCRA, CERCLA, or other.
4. Description of site to be remediated and/or material(s) being proposed for disposal. This would include any information on what the material(s) was used for, historical information, type of site (manufacturing, maintenance, disposal, etc.) , and if the material(s) was under any NRC or other type of license. If information is not known or is unavailable, please explain procedures proposed to gather such information.
5. Estimated volume of material(s), radionuclides, and concentrations. Description of mixed waste if any. If information is not known or is unavailable, please explain procedures proposed to gather such information.
6. Proposed method of disposal or treatment. If information is not known or is unavailable, please explain procedures to arrive at proposed methods.
7. Proposed method(s) of packaging and transportation.
8. Special requirements relating to Compacts, Federal, State, or local regulations or procedures.

30 Jun 97

**Request for Low-Level Radioactive Waste (LLRW)/Mixed Waste (MW)
Generated for Disposal**

Send or Fax to HTRW-CX, ATTN: CENWO-HX-S, 12565 West Center Road, Omaha NE 68144-3869
Fax 402-697-2613. For additional information or POC see the HTRW Center of Expertise Specialists.

PROJECT NAME: _____

SITE NAME: _____

REQUESTING POC: _____

PHONE #: _____ FAX #: _____

INSTALLATION NAME: _____

INSTALLATION POC: _____

PHONE #: _____ FAX #: _____

ORIGINATING STATE: _____ COMPACT: _____

COMPACT NOTIFIED: Y/N COMPACT POC: _____

DISPOSAL FACILITY: _____

DISPOSAL POC: _____

PHONE #: _____ FAX #: _____

TRANSPORTATION METHOD: _____

TRANSPORT POC: _____

PHONE #: _____ FAX #: _____

TYPE OF CONTAINERS: _____ #OF CONTAINERS: _____

RADIONUCLIDES OF CONCERN: _____ CONCENTRATIONS: _____

TOTAL VOLUME OR RAD WASTE IN CU FT: _____

MIXED WASTE PRESENT? Y /N: _____ PROFILED YET? Y /N: _____

DESCRIPTION OF WASTE/PROFILE (Attach waste analyses if
available): _____

Within 10 working days the following information will be completed by the DoD Executive Agent and returned to the Requesting POC with copy furnished to HTRW-CX

APPROVED: _____ APPROVED WITH COMMENT: _____ DISAPPROVED: _____
COMMENT/DISAPPROVAL REASONS

SIGNATURE/DATE: _____

30 Jun 97

Figure D-1 is an image of a memorandum from C. McMillan, OASD, to OASA (I,L&E), et al., dated September 3, 1992, designating the Army as the DoD Executive Agent for managing DoD's LLRW. Figure D-2 is an image of a memorandum from L. D. Walker, OASA (I,L&E), to DACS-SF, dated September 18, 1992, transmitting that designation to AMCCOM for implementation. Figure D-3 is an image of a memorandum from S. W. Goodman, DUSD (ES), to OASA (I,L&E), et al., dated January 10, 1994, incorporating the Executive Agent authority of DA into a DoD instruction and specifying the Naval Nuclear Propulsion

Program is not within the Executive Agent's responsibility. Figure D-4 is an image of a memorandum from L. D. Walker, OASD, to DACS-SF dated August 17, 1994, transmitting the Executive Agent authority to AMCCOM and further detailing the LLRW disposal requirements. Figure D-5 is an image of a memorandum from C. Jones, CEMP-RT, to all Commanders of Major Subordinate Commands (MSCs) dated October 5, 1994, describing USACE policy concerning the responsibilities of AMCCOM and HTRW-MCX.

September 3, 1992

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY, (INSTALLATIONS,
LOGISTICS, AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY, (INSTALLATIONS
AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE AIR FORCE, (MANPOWER,
RESERVE AFFAIRS, INSTALLATIONS AND ENVIRONMENT)
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: DoD Low-Level Radioactive Waste (LLRW) Disposal Policy

The Department of the Army has been unofficially functioning as the DoD Agent for LLRW disposal through Interservice Support Agreements (ISSA) with the DoD Components. This memorandum officially designates the Army as the DoD Executive Agent for managing disposal of DoD's LLRW. This does not apply to the LLRW managed by the Naval Nuclear Propulsion Program under the authority of Executive Order 12344 and Public Law 98-525 (42 USC 7158).

The attached guidance outlines responsibilities and procedures under this designation. Costs incurred by the Army in providing these services are to be funded through ISSAs or agreements between the Army and Army customers. Each Component generating LLRW is responsible for instituting and maintaining waste minimization efforts. This policy will be incorporated in a comprehensive DoD Instruction scheduled for coordination later this year.

Attachment

Colin McMillan

Figure D-1. Memo designating DoD executive agent (Continued)

RESPONSIBILITIES AND PROCEDURES

1. The Department of the Army will provide LLRW disposal services, including contract development and administration, for use by DoD Components. Details of these services and any additional DoD specific relationships will be embodied in interservice support agreements (ISSAs) or memoranda of agreements with DoD Components generating LLRW.

2. All procedural matters arising in the disposal of LLRW will be referred to Commander, U.S. Army AMCCM, ATTN: AMSMC-SFR, Rock Island, IL 61299-6000. A working group, composed of members from each Component, will be established. This Component working group will meet periodically to review procedural issues. Components may refer policy issues to the Defense Environmental Policy Council (DEPC) for action. The DEPC may constitute, as appropriate, a committee to develop solutions.

3. Costs incurred by the Department of the Army in providing these services are to be funded through ISSAs or agreements between the AMCCOM and DoD customers using established procedures.

4. The Department of the Army will provide the following additional capabilities :

- a. Provide technical assistance and information related to the operation of the DoD LLRW disposal program.
- b. Develop and maintain procedures for packaging, transportation and disposal of LLRW.
- c. Maintain an inventory of wastes disposed of, and any other information required by State, State Compacts and Federal regulatory authorities.
- d. Maintain ongoing liaison with all State, State Compacts and Federal regulators. Advise DoD Components, as required, of new laws, regulations and requirements.
- e. Develop and maintain a central file on State and Federal requirements for packaging, transportation and disposal of LLRW.
- f. Establish and maintain an ongoing LLRW volume-reduction program and stay abreast of state of the art developments in LLRW minimization technology.

Figure D-I. (Concluded)

MEMORANDUM THRU DIRECTOR OF THE ARMY STAFF

FOR ARMY SAFETY OFFICE (DACS-SF)

SUBJECT : Department of Defense Low-Level Radioactive
Waste (LLRW) Disposal Policy

Attached is the official designation of the Army as the Executive Agent for the disposal of LLRW for the Department of Defense. Also attached are the responsibilities and procedures for the implementation of this designation.

Request this designation be officially transmitted through appropriate command channels to the U.S. Army Armament, Munitions and Chemical Command for implementation. Further request an implementation plan including a schedule of rates to be charged for their services be developed within 120 days of receipt of this designation.

A component working group will be formed to assist in the development of a rate schedule and to establish detailed procedural instructions which will be used by each of the customers in order to request and receive services by the Army.

All costs incurred by the Army in providing these services are to be funded through Interservice Support Agreements. It is imperative that these agreements be developed and signed as soon as possible to ensure that continued service is provided to all customers. Failure to implement may lead to legal and pecuniary liability for commanders in the field.

Request you acknowledge receipt of this memorandum. My point of contact is Lieutenant Colonel Randall Morin at (703) 697-0440.

Lewis D. Walker
Deputy Assistant Secretary of the Army
(Environmental, Safety and Occupational Health)
OASA (I,L&E)

Attachments

Figure D-2. Memorandum transmitting executive agent status to AMCCOM

30 Jun 97

DUSD (ES)/PP

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY
(INSTALLATIONS, LOGISTICS AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY
(INSTALLATIONS AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE AIR FORCE
(MANPOWER, RESERVE AFFAIRS, INSTALLATIONS
AND ENVIRONMENT)
DIRECTOR, DEFENSE LOGISTICS AGENCY (D)

SUBJECT : Department of Defense Low-Level Radioactive
Waste (LLRW) Disposal Policy

The Department of the Army was appointed the Department of Defense (DOD) Executive Agent for the management of the disposal of LLRW for the Department by Assistant Secretary of Defense (Production and Logistics (ASD (P&L) memorandum of September 3, 1992. This policy was never incorporated into a DoD Instruction as indicated in the memorandum. Therefore, this memorandum officially continues the policy originally established by the ASD (P&L) memorandum and adds some supplemental responsibilities for the Executive Agency. This does not apply to the LLRW managed by the Naval Nuclear Propulsion Program under Authority of Executive Order 12344, Naval Nuclear Propulsion Program, and Public Law 98-525 (42 USC 7158).

As Executive Agent for the managing disposal of DOD's LLRW, the Department of the Army is assigned the supplemental responsibilities:

- providing disposal services on a cost-reimbursable basis for the DoD components
- maintaining central inventory of all LLRW disposed of and through the DoD program
- fostering relationships with licensing agencies and compacts on behalf of the DoD LLRW program
- providing guidance to installations for managing, storing and disposing of LLRW
- maintaining a current compilation of federal and state LLRW disposal requirements and
- providing a report to the Deputy Under Secretary of Defense (Environmental Security) within 90 days after the close of each fiscal year on the status of DoD's LLRW program, with a copy furnished to each DoD component.

Figure D-3. Memorandum affirming executive agent status (Continued)

All radioactive waste disposed of by a DoD component shall be coordinated with and approved by the DoD Executive Agent.

Sherri Wasserman Goodman
Deputy Under Secretary of Defense
(Environmental Security)

DASA (E, S&OR)
DASN (E&S)
DASAY (E, S&OM)
DLA- CAAE
DATM-ED-PP (BG Brown)
N45 (RADM Walker)
MC/LFL (BGen Reinke)
AE/CE (BGen McCarthy)
DNA
NSA

Figure D-3. (Concluded)

MEMORANDUM THRU THE DIRECTOR OF THE ARMY STAFF

FOR DIRECTOR OF ARMY SAFETY (DACS-87)

SUBJECT : Department of Army Low Level Radioactive Waste
(LLRW) Disposal and Remediation Policy

The Department of the Army (DA) was appointed by the Assistant Secretary of Defense for Production and Logistics by the Executive Agent to manage the disposal of LLRW generated by activities of the military departments and defense agencies of the Department of Defense (DoD) Attch. 1) . Supplemental responsibilities were issued by the Deputy Under Secretary of Defense for Environmental Security (Attch. 2) .

The U.S. Army Material Command (AMC) should continue to conduct this mission for the Army in its role as the Executive Agent. AMC will meet the following disposal requirements:

- provide LLRW disposal services on a cost-reimbursable basis for the DoD components
- maintain central inventory of all LLRW disposed of through the DoD program
- foster relationships with licensing agencies and compacts on behalf of the DoD LLRW programs
- provide guidance to installations for management, storage and disposal of LLRW
- maintain records necessary to demonstrate that all DoD LLRW is disposed of properly
- maintain a current compilation of federal and state LLRW disposal requirements
- report to the Deputy Under Secretary of Defense (Environmental Security) within 90 days after the close of each fiscal year the status of DoD's LLRW programs, with a copy furnished to each DoD component .

Disposal of all low level radioactive water generated by a DoD component shall be coordinated with and, with limited prior exceptions related to environmental restoration activities, approved by the DoD Executive Agent. The above DoD requirements apply only to DoD component funded projects.

The U.S. Army Corps of Engineers (USACE) should continue to execute their current mission with regard to hazardous, toxic and radioactive waste remediation and installation support to the Defense Environmental Restoration Program (DERP) and the Realignment and Closure Program. Installation commanders, however, may determine the appropriate contractual mechanisms to manage and dispose of LLRW generated as a result of or incident to Resource Conservation and Recovery Act corrective actions and DRRP remediation activities. Commanders may utilize LLRW disposal mechanisms available within the USACE or AMC, or other mechanisms as appropriate, to ensure the accomplishment of uninterrupted expeditious remediations. The agency executing the remediation is responsible to coordinate all LLRW disposal actions with AMC to ensure appropriate disposal is accomplished and that appropriate records are maintained and reported for all DoD LLRW disposal actions.

This policy memorandum was developed after considerable discussion and staffing with the affected parties. Request appropriate action be taken to

Figure D-4. Memorandum defining AMC requirement pertaining to LLRW/MW (Continued)

ensure that the information contained in this memorandum is incorporated into implementing regulations and other appropriate documents. Affected parties throughout the DoD should be made aware of this information. The point of contact in my office for this action is Mr. Rick Newsome. He can be reached at (703) 614-9531.

Lewis D. Walker
Deputy Assistant Secretary of the Army
(Environment, Safety and Occupational Health)

Attachments

Figure D-4. (Concluded)

CEMP - RT

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT : Department of Army Low Level Radioactive Waste (LLRW) Disposal and Remediation Policy

1. Reference:

a. Memorandum, Office of the Assistant Secretary of Army, Installations, Logistics and Environment, Aug. 17, 1994, SAB (Encl 1) .

b. Memorandum, Office of the Under Secretary of Defense, 10 January 1994, Subject: Department of Defense Low Level Radioactive Waste (LLRW) Disposal Policy (Encl 2) .

c. Memorandum, Assistant Secretary of Defense, September 3, 1994, Subject: DoD Low Level Radioactive Water (LLRW) Disposal Policy (Encl 3) .

2. On 3 September 1992, the Department of Army (DA) was officially designated as the DOD Executive Agent for managing disposal of DOD's LLRW. The DA delegated this responsibility to the U.S. Army Armament, Munitions and Chemical Command (AMCCOM) , which is also assigned certain other responsibilities identified in references 1a thru 1c.

3. The DOD Executive Agent is to assure that DOD Components' LLRW disposal practices are in compliance with constantly changing regulatory and license requirements, and to ensure the Components' awareness of all available disposal options.

4. By reference 1a, the Army set policy differentiating between disposal and reporting activities, and cleanup execution activities. The U.S. Army Corps of Engineers (USACE) should continue to execute its current missions as before, utilizing contract mechanisms which USACE determines are appropriate. The USACE must coordinate all LLRW disposal actions with AMCCOM to ensure appropriate disposal is accomplished and that appropriate records are maintained and reported. All USACE elements must coordinate and report all LLRW potential projects and activities to the USACE HTRW-MCX, ATTN: CEMRD - ET-H, Omaha, NE 68144-3869. The USACE HTRW-MCX will perform USACE-wide coordination with AMCCOM.

5. In addition, Installation Commanders (IC) may determine the appropriate execution agent and attendant contractual mechanism. ICs may utilize USACE, AMC , or others as appropriate.

6. Disposal of military funded LLRW must be coordinated with, and have approval of, the DOD Executive Agent, to ensure appropriate disposal is accomplished and related records are maintained and reported.

7. Request immediate implementation of the new DA policy in ref 1a. To facilitate this implementation, request the following actions be pursued:

Figure D-5. Memorandum to MSRs describing roles of USACE, AMCCOM, and HTRW-MCX pertaining to LLRW/MW (Sheet 1 of 3)

CEMP - RT

SUBJECT : Department of Army Low Level Radioactive Waste (LLRW) Disposal and Remediation Policy

USACE districts are requested to submit to the USACE HTRW-MCS a report using the enclosed form (Encl 4) , identifying current military and nonmilitary funded projects involving LLRW. This report is to be submitted by 1 November 1994.

b. All Scopes of work or Disposal Plans that require or describe disposal of LLRW shall be submitted to the HTRW-MCX for technical review. This review process is to assure that all requirements are being addressed and to provide guidance on disposal options. These documents need to be submitted as early in the planning stage as possible, to assure that a disposal mechanism is available and to avoid delays in the project.

c. All requests for coordination with DOD Executive Agent shall be routed through the HTRW-MCX, after Scopes of Work or Disposal Plans have been reviewed. The HTRW-MCX will provide assistance in coordination with DOD Executive Agent. Additional information will be provided to the Districts by the HTRW-MCX as it becomes available from the DOD Executive Agent.

d. The HTRW-MCX will keep an inventory of all military and non-military projects requiring disposal of LLRW and may request additional information as to the type and volumes of waste requiring disposal, and the proposed disposal or storage facility.

e. Through an existing Inter-Service Support Agreement (ISSA) with AMCCOM, the Corps can request disposal related services from AMCCOM, however, all such requests must be directed through the USACE HTRW-MCX.

CEMP - RT

SUBJECT : Department of Army Low Level Radioactive Waste (LLRW) Disposal and Remediation Policy

8. For further information, contact Mr. Bob Curnyn, CEMRD-ET-HT, (402) 221-7388, or Dr. Reuben Sawdaye, CEMP-RT, at (202) 272-8881.

FOR THE DIRECTOR OF MILITARY PROGRAMS:

4 Encls

CARY JONES
Chief, Environmental Restoration Division
Directorate of Military Programs

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ASA(I,L&E)-ESOH
HQDA, DAIM-ED-R
AMCCOM (AMSMC-RW)
CESO-I (Mr. Stout)